

What is claimed is:

1. A method for dynamic quality of service provisioning, comprising the steps of:
receiving a provisioning event requesting a minimum quality of service for a modem;
generating a modem configuration file for the modem to implement the minimum
quality of service based on the provisioning event;
rebooting the modem; and
transmitting the modem configuration file to the modem such that the modem will
implement the minimum quality of service.
2. The method of Claim 1, further comprising the steps of:
determining after the receiving step whether the provisioning event is a start time
provisioning event after the receiving step;
waiting for a start time if the provisioning event is a start time provisioning event; and
performing the generating, rebooting, and transmitting steps when the start time has
been reached.
3. The method of Claim 1, further comprising the steps of:
determining after the receiving step whether the provisioning event is a stop time
provisioning event after the receiving step;
waiting for a stop time if the provisioning event is a stop time provisioning event;
generating another modem configuration file for the modem when the stop time has
been reached to implement a previous minimum quality of service based on a quality of
service of the modem prior to receiving the provisioning event;
rebooting the modem; and

transmitting the another modem configuration file to the modem such that the modem will implement the previous minimum quality of service.

4. The method of Claim 1, wherein the configuration file comprises a digitally signed file.

5. The method of Claim 1, wherein the configuration file comprises an MD5 file..

6. The method of Claim 1, wherein the rebooting step comprises rebooting the modem using dynamic host configuration protocol commands.

7. The method of Claim 1, wherein the transmitting step comprises transmitting the modem configuration file using at least one of a trivial file transfer protocol, a file transfer protocol, and another transfer utility.

8. The method of Claim 1, wherein the minimum quality of service comprises at least one of a committed level of bandwidth, a network availability, an error performance, a metric of lost calls or transmissions due to network congestion, a connection setup time, and a speed of fault detection or correction.

9. The method of Claim 1, where the receiving step comprises receiving the provisioning event through at least one of a customer service representative, an end-user of the modem, and a non-human triggering event through at least one of a hardware device or software mechanism.

10. A system for dynamic quality of service provisioning, comprising:

a processor; and

a computer readable medium encoded with processor readable instructions that when executed by the processor implement

a provisioning event reception mechanism configured to receive a provisioning event requesting a minimum quality of service for a modem,

a modem configuration file generation mechanism configured to generate a modem configuration file for the modem to implement the minimum quality of service based on the provisioning event,

a reboot mechanism configured to reboot the modem, and

a configuration file transmission mechanism configured to transmit the modem configuration file to the modem such that the modem will implement the minimum quality of service.

11. The system of Claim 10, further comprising:

a provisioning event categorization mechanism configured to categorize a received provisioning event as one of a non-time dependent provisioning event, a start time provisioning event, and a stop time provisioning event;

a start time provisioning event processing mechanism configured to wait for a start time if the received provisioning event is a start time provisioning event prior to generating the modem configuration file, rebooting the modem, and transmitting the modem configuration file to the modem; and

a stop time provisioning event processing mechanism configured to

wait for a stop time if the provisioning event is a stop time provisioning event prior to generating another modem configuration file for the modem when the stop time has been reached to implement a previous minimum quality of service based on a quality of service of the modem prior to receiving the provisioning event,

reboot the modem, and

transmit the another modem configuration file to the modem such that the modem will implement the previous minimum quality of service.

12. The system of Claim 10, wherein the configuration file comprises a digitally signed file.

13. The system of Claim 10, wherein the configuration file comprises an MD5 file.

14. The system of Claim 10, wherein the reboot mechanism is further configured to reboot the modem using dynamic host configuration protocol commands.

15. The system of Claim 10, wherein the configuration file transmission mechanism is further configured to transmit the modem configuration file using at least one of a trivial file transfer protocol, a file transfer protocol, and another transfer utility.

16. The system of Claim 10, wherein the minimum quality of service comprises at least one of a committed level of bandwidth, a network availability, an error performance, a metric of lost calls or transmissions due to network congestion, a connection setup time, and a speed of fault detection or correction.

17. The system of Claim 10, wherein the provisioning event reception mechanism is further configured to receive the provisioning event through at least one of a customer service representative, an end-user of the modem, and a non-human triggering event through at least one of a hardware device or software mechanism.

18. A system for dynamic quality of service provisioning, comprising:

means for receiving a provisioning event requesting a minimum quality of service for a modem;

means for generating a modem configuration file for the modem to implement the minimum quality of service based on the provisioning event;

means for rebooting the modem; and

means for transmitting the modem configuration file to the modem such that the modem will implement the minimum quality of service.

19. A computer program product, comprising:

a computer storage medium; and

a computer program code mechanism embedded in the computer storage medium for causing a processor to perform dynamic quality of service provisioning, the computer program code mechanism having,

a first computer code device configured to receive a provisioning event requesting a minimum quality of service for a modem,

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a second computer code device configured to generate a modem configuration file for the modem to implement the minimum quality of service based on the provisioning event,

a third computer code device configured to reboot the modem, and

a fourth computer code device configured to transmit the modem configuration file to the modem such that the modem will implement the minimum quality of service.

20. The computer program product of Claim 19, wherein the computer program code mechanism further comprises

a fifth computer code device configured to categorize a received provisioning event as one of a non-time dependent provisioning event, a start time provisioning event, and a stop time provisioning event;

a sixth computer code device configured to wait for a start time if the received provisioning event is a start time provisioning event prior to generating the modem configuration file, rebooting the modem, and transmitting the modem configuration file to the modem; and

a seventh computer code device configured to

wait for a stop time if the provisioning event is a stop time provisioning event prior to generating another modem configuration file for the modem when the stop time has been reached to implement a previous minimum quality of service based on a quality of service of the modem prior to receiving the provisioning event,

reboot the modem, and

transmit the another modem configuration file to the modem such that the modem will implement the previous minimum quality of service.

21. The computer program product of Claim 19, wherein the configuration file comprises a digitally signed file.

22. The computer program product of Claim 19, wherein the configuration file comprises an MD5 file.

23. The computer program product of Claim 19, wherein the third computer code device is further configured to reboot the modem using dynamic host configuration protocol commands.

24. The computer program product of Claim 19, wherein the fourth computer code device is further configured to transmit the modem configuration file using at least one of a trivial file transfer protocol, a file transfer protocol, and another transfer utility.

25. The computer program product of Claim 19, wherein the minimum quality of service comprises at least one of a committed level of bandwidth, a network availability, an error performance, a metric of lost calls or transmissions due to network congestion, a connection setup time, and a speed of fault detection or correction.

26. The computer program product of Claim 19, wherein the first computer code device is further configure to receive the provisioning event through at least one of a

customer service representative, an end-user of the modem, and a non-human triggering event through at least one of a hardware device or software mechanism.

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